Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-26. (Cancelled)

27. (New) A diffraction-based assay device for detecting the presence of an analyte, the device comprising:

a substrate on which a binder is present in a pattern; and

a fluidic guide that is in direct communication with the substrate, wherein the fluidic guide includes at least one channel through which a fluid sample is capable of flowing via capillary action.

28. (New) The diffraction-based device of claim 27, wherein electromagnetic radiation is capable of passing through the fluidic guide to the substrate.

29. (New) The diffraction-based device of claim 27, wherein the device further comprises an opening that permits the passage of electromagnetic radiation to the substrate.

30. (New) The diffraction-based device of claim 27, wherein a layer of wicking material is also disposed on the substrate, the layer defining an opening through which electromagnetic radiation is capable of passing.

31. (New) The diffraction-based device of claim 27, wherein a second binder is also present on the substrate.

32. (New) The diffraction-based device of claim 27, wherein the channel includes an interior passage defined between a first opening and a second opening, the

first opening being capable of receiving the fluid sample and the second opening being positioned adjacent to the substrate.

33. (New) The diffraction-based device of claim 32, wherein the first opening is beveled.

34. (New) The diffraction-based device of claim 27, wherein the fluidic guide is generally linear.

35. (New) The diffraction-based device of claim 27, wherein the fluidic guide has one or more turns or branches.

36. (New) The diffraction-based device of claim 27, wherein the fluidic guide is positioned generally perpendicular to the substrate.

37. (New) The diffraction-based device of claim 27, wherein the fluidic guide is in communication with a well, the well initially receiving the fluid sample.

38. (New) The diffraction-based device of claim 27, wherein the fluidic guide is positioned directly adjacent to the substrate.

39. (New) The diffraction-based device of claim 27, wherein the substrate comprises a polymer film.

40. (New) The diffraction-based device of claim 39, wherein the substrate further comprises a coating on the polymer film, the coating comprising a metal.

41. (New) The diffraction-based device of claim 27, wherein the fluidic guide contains a material that has an affinity for the fluid sample that is greater than the affinity of the fluid sample to the source from which the sample is obtained.

42. (New) A diffraction-based assay device for detecting the presence of an analyte, the device comprising:

a substrate that comprises a polymer film and an optional metal coating, wherein a binder is present on the substrate in a pattern; and

a fluidic guide that is in direct communication with the substrate, wherein the fluidic guide includes at least one channel through which a fluid sample is capable of flowing via capillary action.

43. (New) The diffraction-based device of claim 42, wherein a layer of wicking material is also disposed on the substrate, the layer defining an opening through which electromagnetic radiation is capable of passing.

44. (New) The diffraction-based device of claim 42, wherein the device further comprises an opening that permits the passage of electromagnetic radiation to the substrate.

45. (New) The diffraction-based device of claim 42, wherein the fluidic guide is generally linear.

46. (New) The diffraction-based device of claim 42, wherein the fluidic guide has one or more turns or branches.

47. (New) The diffraction-based device of claim 42, wherein the fluidic guide is in communication with a well, the well initially receiving the fluid sample.

48. (New) A system for detecting the presence of an analyte, the system comprising:

a diffraction-based device that comprises:

a substrate on which a binder is present in a pattern; and

a fluidic guide that is in direct communication with the substrate, wherein the fluidic guide includes at least one channel through which the fluid sample is capable of flowing via capillary action; and

an electromagnetic radiation source that is positioned to direct electromagnetic radiation to the substrate so that a diffraction pattern is capable of being generated upon contacting an analyte on the substrate.

49. (New) The system of claim 48, further comprising a detector for detecting the diffraction pattern.

50. (New) The system of claim 48, wherein the substrate comprises a polymer film that is generally transparent to the electromagnetic radiation.